

ABSTRACT OF THE DISCLOSURE

A system for storing and dynamically updating data represented in the Extensible Markup Language (XML) which separates the data values in at least some of the elements of an XML document and places those data values in relational database tables where they may be processed using conventional RDBMS techniques. The hierarchical structure of the XML document is saved separately in an XML skeleton object from which element data other than primary key values has been removed. The XML documents document type definition (DTD) is stored, along with additional property data used the the RDBMS, in an XML Definition object. The additional property information includes the identification of primary key data values which are used to link the structural definition data to the value data stored in the tables, the designation of data types used for more efficient storage of data from predetermined XML elements, the designation of selected element data for indexing and for column storage, and the designation or relational integrity constraints which help insure that logically connected data is not inappropriately deleted or updated. The XML data as stored in the relational tables can be retrieved as a complete XML document, or selected XML elements can be retrieved by themselves, by merging the table data into the XML skeleton.